

Work Order ID 150208***150208***

Page 1

Wednesday, August 24, 2016 11:26:57 AM

Item ID: D3255-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Access Panel Assembly
Start Date: 8/15/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 8/25/2016 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: DAS 21 Date: AUG 25 2016 Tooling: _____ Date: _____ Run Start ***NR1***
QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3255	Rev B

100

0.00

100

Large Fab

Large Fab

Memo

0.31

Large Fab

1-Weld as per Dwg D3255 ***purge weld***A/R SS ROD
Batch: 134442 2-Grind Welds Flush

110

QC10- Inspect visual per QSI004- ground welds

0.00

110

QC

Memo

0.00

Quality Control

120

QC5- Inspect part completeness to step on W/O

0.00

120

QC

Memo

0.01

Quality Control

DAS
38
OCT 03 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

Work Order ID 150208***150208***

Page 2

Wednesday, August 24, 2016 11:26:58 AM

Item ID: D3255-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Access Panel Assembly
Start Date: 8/15/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 8/25/2016 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per OSI005 4.3 <i>M134858</i> Memo START TIME: <i>1:25</i> OVEN TEMPERATURE: <i>320</i> FINISH TIME: <i>1:55</i>	0.00 0.01				<i>2</i>	<i>0</i>	<i>1610-3</i>	<i>34</i> <i>9-89</i>
140 *140* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				<i>2</i>			<i>EB</i> <i>16-10-03</i>
150 *150* Small Fab Small Fab	Small Fab Memo 1-Bond D3255-5 gasaket to d3255-042 using Dow corning adhesive as per Dwg D3255A/R 736 DOW CORNING ADHESIVE Batch: <i>M131824</i>	0.00 0.12				<i>2</i>	<i>FF</i>	<i>OCT 11 2016</i>	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Work Order ID 150208

Wednesday, August 24, 2016 11:26:58 AM

150208

Page 3

Item ID: D3255-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Access Panel Assembly
Start Date: 8/15/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 8/25/2016 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC5- Inspect part completeness to step on W/O	0.00							
160									
QC	Memo	0.01							
Quality Control									
									OCT 11 2016
170	Identify as per dwg & Stock Location: <u>Sh489</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging									
									OCT 12 2016
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.03							
Quality Control									
									OCT 12 2016

VS 16/10/12

DAS
21
9-89

OCT 12 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Picklist Print

Wednesday, August 24, 2016 11:26:57 AM

Page 1

Work Order ID: 150208

150208

Parent Item: D3255-042

D3255-042

Parent Item Name: Access Panel Assembly

Start Date: 8/15/2016

Required Date: 8/25/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:C Removed Manufacturing of D3255-1/-2/-3 06-08-02 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3255-2 *D3255-2* Panel		Manufactured	No			100	Each	8.0000	1	2			
									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA002				8					
				— 145876				8		<u>2</u>			
D3255-3 *D3255-3* Cap		Manufactured	No			150	Each	17.0000	1	2			
									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA001				17					
				116750				1					
				— 145421				16		<u>2</u>			
D3255-5 *D3255-5* Gasket		Manufactured	No			100	Each	8.0000	1	2			
									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				GA				8					
				— 145595				8		<u>2</u>			

16-09-15
JSL

16-09-15
JSL

FF
OCT 06 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

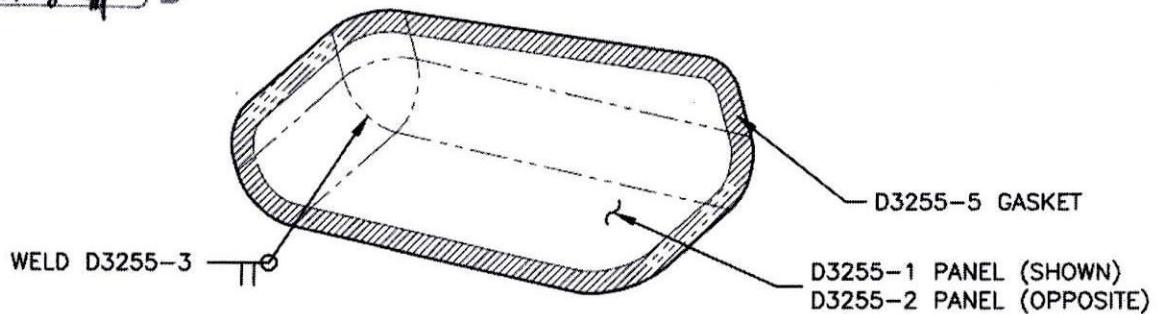
QA Closed: _____ Date: _____

Work Order update only ☐

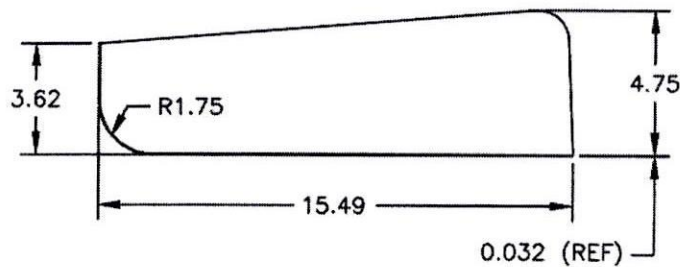
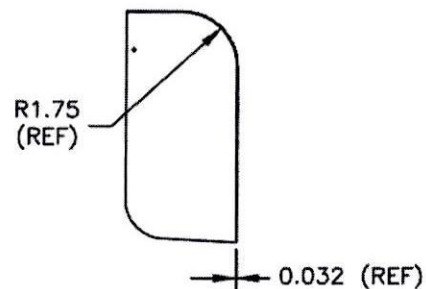
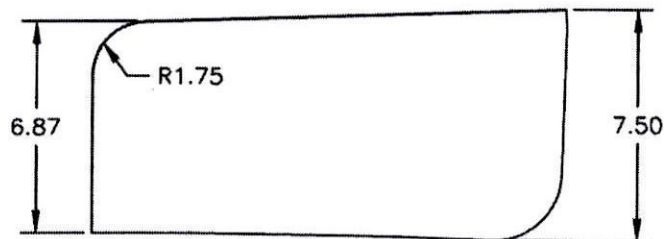
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By _____		
							Lead hand / Supervisor Approval Verification _____		
							QC / QA Coordinator Approval _____		
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DART

DESIGN FJ	DRAWN BY FJ	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED JP	APPROVED FJ	DRAWING NO. D3255	REV. B SHEET 1 OF 4
DATE 04.12.06		TITLE ACCESS PANEL ASSEMBLY	SCALE 1:6
A	04.01.27	NEW ISSUE	
B	04.12.06	D3255-3 REDESIGN; ADDED $\phi 0.098$	

RELEASED
05-01-18

D3255-041 ACCESS PANEL (SHOWN)
D3255-042 ACCESS PANEL (OPPOSITE)



D3255-1 BEND DETAIL
D3255-2 OPPOSITE

D3255-041/-042 NOTES:

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER QSI 005 4.3
- 3) INSTALL D3255-5 GASKET USING DOW CORNING P/N 736 ADHESIVE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS
- 4) IDENTIFY WITH P/N & B/N USING FINE POINT PERMANENT MARKER

150008 MJS
160825

CONTROLLED COPY
RETURN TO
ENGINEERING
WITHOUT NOTICE
WORK ORDER

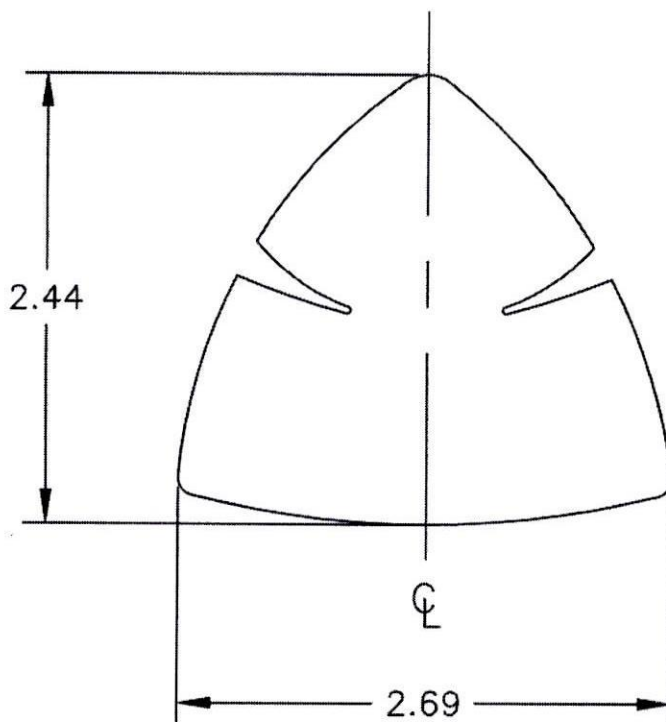
Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED q	APPROVED [Signature]	DRAWING NO. D3255	REV. B SHEET 2 OF 4
DATE 04.12.06		TITLE TITLE	SCALE 1:1

RELEASED
05-01-18 [Signature]



D3255-3 CAP
FORM TO FIT D3155-1/-2

D3255-3 NOTES:

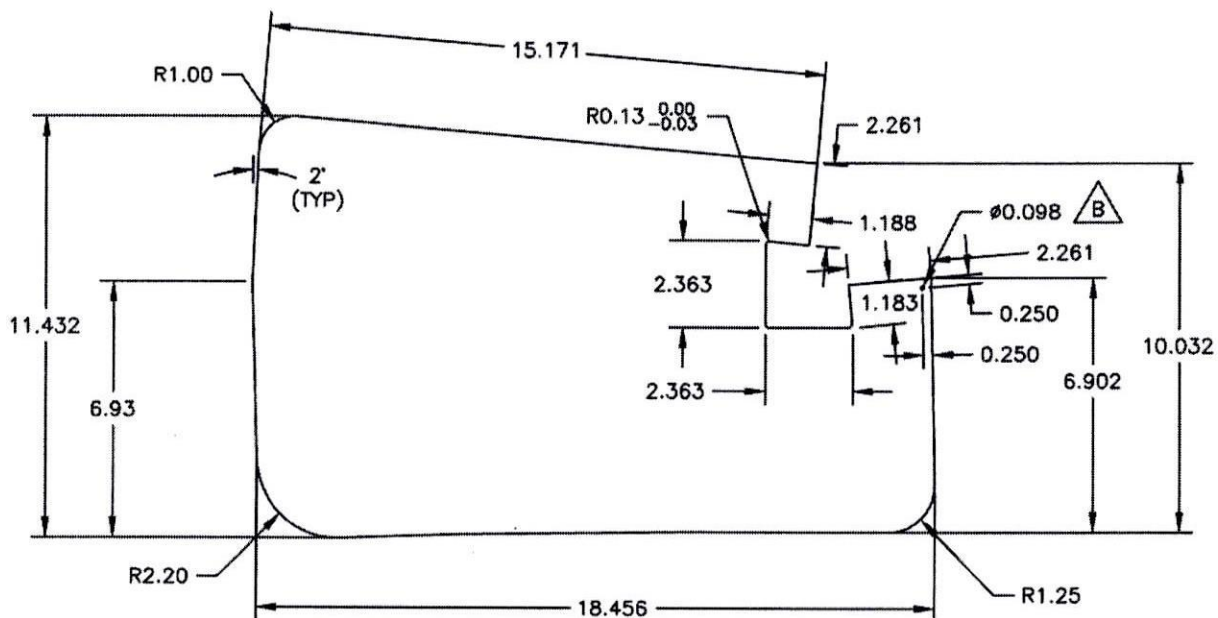
- 1) MATERIAL: AISI 304/316 SS 0.032 THICK (REF. M304S22GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 6) MAKE PER DRAWING "D3255-B2.DWG"

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

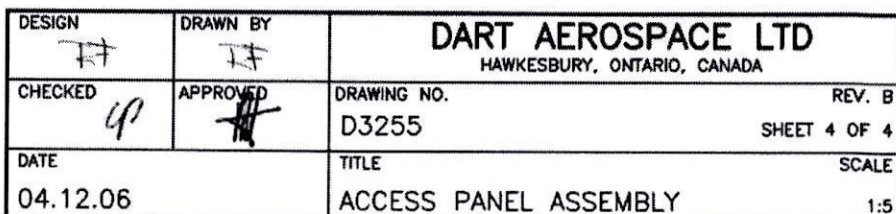
DESIGN RF	DRAWN BY TF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED UP	APPROVED H	DRAWING NO. D3255	REV. B SHEET 3 OF 4
DATE 04.12.06		TITLE ACCESS PANEL ASSEMBLY	SCALE 1:5

RELEASED
05-01-18**D3255-1/-2 FLAT PATTERN****D3255-1/-2 NOTES:**

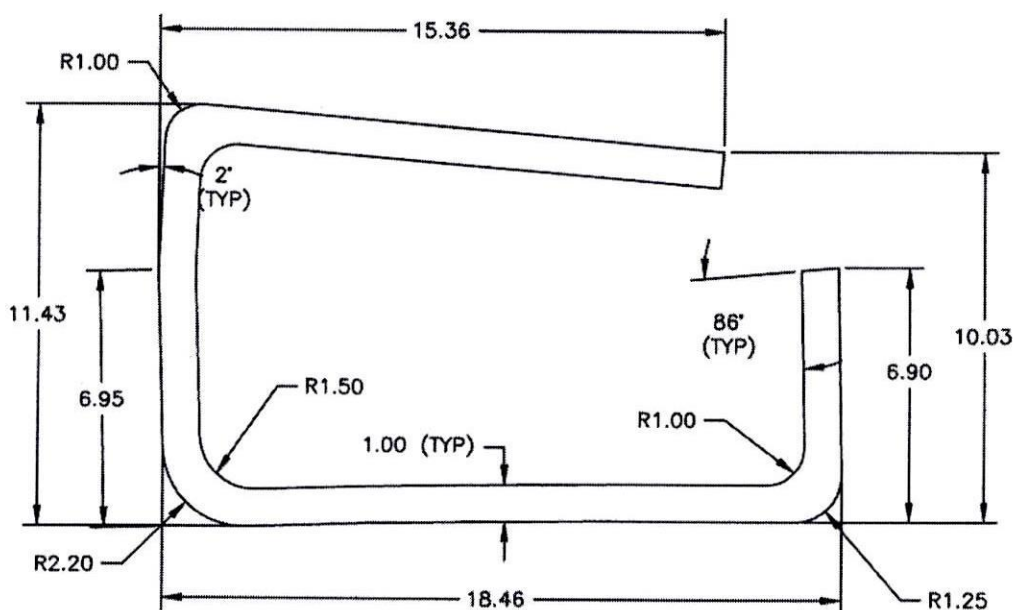
- 1) MATERIAL: AISI 304/316 SS 0.032 THICK (REF. M304S22GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



RELEASED
05 01 18 ~~11~~



D3255-5 NOTES:

- 1) MATERIAL: SILICONE COATED FIBERGLASS CLOTH PER AMS 3320F
P/N SIL/F 36x36x1/16
POSSIBLE SUPPLIER: AVIALL
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.